

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A data transmission process with ~~auto-synchronised~~
auto-synchronized correcting code, ~~characterized in that comprising:~~

a) ~~at transmission:~~

i) ~~defining a timing of bits of the data, to be transmitted, being constituted by~~
~~bits having a timing defined by a clock signal (H), synchronisation and forming~~
synchronization management signals ~~are formed~~ including:

[[-]] a symbol clock signal (~~HS~~) m times less fast than the clock signal, (~~H~~)
where m is an integer, m bits constituting an information symbol (~~S~~),

[[-]] a ~~synchronisation symbol~~ synchronization signal (~~SS~~) designating the
first symbol of the packet, and

[[-]] a data acquisition interruption signal (~~ID~~) intervening every K
symbols, where K is a pre-set integer[[,]];

ii) ~~under the control of the data acquisition interruption signal (ID), inserting a~~
header before a first group of K symbols ~~is inserted a header and, and inserting a second~~
group of R symbols after said first group, ~~is inserted a the~~ second group of R symbols
constituting a correcting code corresponding to the K symbols of the first group, R being a
pre-set integer dependent on the a correcting code type used, the first and second groups of
(R+K) symbols forming a packet, and the header being a header specific to this packet[[,]];
and

iii) modulating and transmitting each packet ~~is modulated and transmitted in~~
~~an appropriate way~~ with its header[[,]];

b) ~~at the a~~ receive end:

i) ~~demodulating~~ the signal received is ~~demodulated~~, and extracting the bit clock signal ~~(H)~~ is extracted;

ii) ~~from the demodulated signal~~, implementing a header search process is ~~implemented in the demodulated signals~~ signal and, when a the header is detected, inhibiting the header search process ~~is inhibited~~, and the ~~synchronisation~~ synchronization control (SS) is ~~generated designating the first packet signal~~ and generating the symbol synchronization symbol;

iii) ~~under the control of the symbol clock (HS)~~ and symbol ~~synchronisation~~ (SS) synchronization signals, processing the received packet is ~~processed~~, so as to correct any erroneous symbols of the first group by ~~means of~~ the correcting code of the second group~~[[,]]~~ and reactivating the header search process ~~is reactivated~~ after each packet processing~~[[,]]~~; and

iv) retrieving, from the corrected symbols, the transmitted data ~~is retrieved~~.

Claim 2 (Currently Amended): A process according to claim 1, wherein:

a) ~~at transmission~~, modulation is effected by spread spectrum by means of pseudo-random sequences~~[[,]]~~; and

b) ~~correlation with the pseudo-random sequences~~ is used at transmission.

Claim 3 (Original): A process according to claim 1, wherein the correcting code is a Reed-Solomon type code.

Claim 4 (Currently Amended): An ~~auto-synchronised~~ auto-synchronized coder for implementing the process according to claim 1, ~~characterized in that it includes~~ comprising:

i) ~~means (65)~~ for forming synchronization management signals, the synchronization management signals including:

[[-]] a ~~the~~ symbol clock signal (HS) m times less fast than a ~~the~~ clock signal (H) timing the data bits, where m is an integer, m bits constituting ~~an~~ the information symbol-(S),

[[-]] a ~~the~~ symbol ~~synchronisation~~ synchronization signal (SS) locating the start of each symbol, and

[[-]] every K symbols, where K is a pre-set integer[[,]]; and

ii) ~~means (60, 64, 66, 67, 68)~~ for inserting, under ~~the~~ control of the acquisition interruption signal-(ID), a packet header before a first group of K symbols ~~a packet header~~ and[[,]] a second group of R symbols after said first group, ~~a the~~ second group of R symbols constituting a correcting code assigned to the K symbols of the first group, R being a pre-set integer dependent on the correcting code type used, the first and second group of (R+K) symbols forming a packet, and the header being a header specific to this packet. [[:]]

Claim 5 (Currently Amended): An ~~auto-synchronisation~~ auto-synchronization decoder for implementing the process according to claim 1, ~~characterised in that it includes~~ comprising:

i) ~~means (72)~~ for constituting, from a data packet, a ~~the~~ clock signal-(H), a ~~the~~ symbol clock signal (HS) and a ~~the~~ symbol ~~synchronisation~~ synchronization signal-(SS); and

ii) ~~means (71, 73, 74, 75)~~ for implementing a header search process in the demodulated packet ~~and~~, for inhibiting the header search when a header is detected, ~~for inhibiting the header search~~ and for, under ~~the~~ control of the symbol clock (HS) and the symbol ~~synchronisation~~ synchronization signals-(SS), processing the packet received ~~and for~~, correcting any erroneous symbols of the first group by means of the correcting code of the second group, ~~and, for~~ reactivating the header search process after each packet processing.

Claim 6 (Currently Amended): A transmitter for implementing the process according to claim 1, ~~including comprising:~~

a transmission module (95) ~~able configured~~ to modulate the data and to spread the spectrum of ~~this-the~~ data by a pseudo-random sequence, ~~characterised in that it additionally includes;~~ and

before said transmission module, an ~~auto-synchronised~~ auto-synchronized coder (92) ~~according to claim 4 including:~~

means for forming synchronization management signals, the synchronization management signals including:

the symbol clock signal m times less fast than the clock signal timing the data bits, where m is an integer, m bits constituting the information symbol,

the symbol synchronization signal locating the start of each symbol, and every K symbols, where K is a pre-set integer,

means for inserting, under control of the acquisition interruption signal, a packet header before a first group of K symbols and a second group of R symbols after said first group, the second group of R symbols constituting a correcting code assigned to the K symbols of the first group, R being a pre-set integer dependent on the correcting code type used, the first and second group of (R+K) symbols forming a packet, and the header being a header specific to this packet.

Claim 7 (Currently Amended): A receiver for implementing the process according to claim 1, ~~including comprising:~~

a receive module (102) ~~able configured~~ to demodulate the data and to de-spread the spectrum of ~~this-the~~ data by a pseudo-random sequence, ~~characterised in that it additionally includes;~~ and

after said receive module, an ~~auto-synchronised~~ auto-synchronized decoder (100)
~~according to claim 5~~ including:

means for constituting, from a data packet, the clock signal, the symbol clock
signal and the symbol synchronization signal; and

means for implementing a header search process in the demodulated packet,
for inhibiting the header search when a header is detected, and for, under control of the
symbol clock and the symbol synchronization signals, processing the packet received,
correcting any erroneous symbols of the first group by means of the correcting code of the
second group, and reactivating the header search process after each packet processing.